Electronic Supplementary Information (ESI) for Journal of Materials Chemistry

Facile and Controlled Synthesis of the Self-conjugated Ag@IP_6-Micelle Compositions for Surface-enhanced Spectroscopic Application

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Supplementary Information

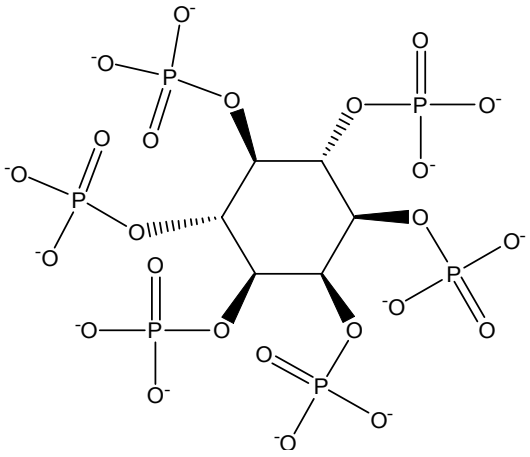

Fig. S1. Structure of Inositol hexakisphosphoric

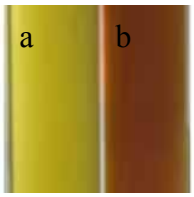

Fig. S2. The color of the (a) Sample 1 and (b) Sample 2.The photos are taken from solutions

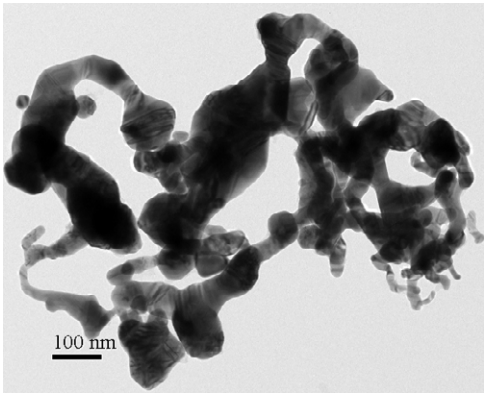

Fig. S3 . The TEM image of the silver product obtained without the IP_6 micelles at the same reaction condition for synthesis of Sample 2

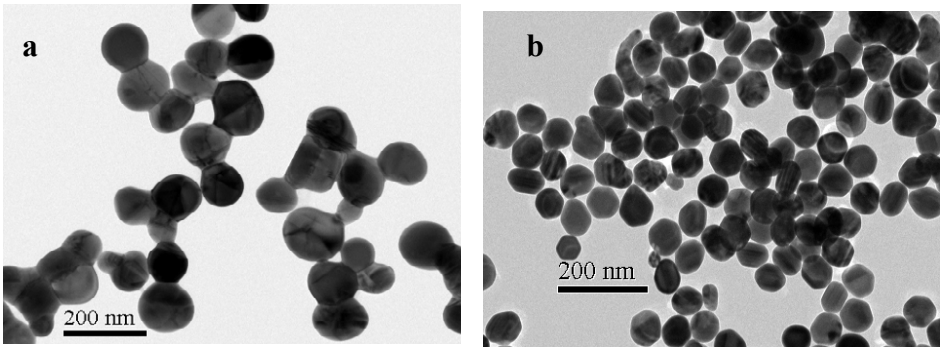

Fig. S4. The TEM images of the Ag nanoparticles obtained by the reduction reaction occurring at (a) room temperature (b) $50^{o}C$

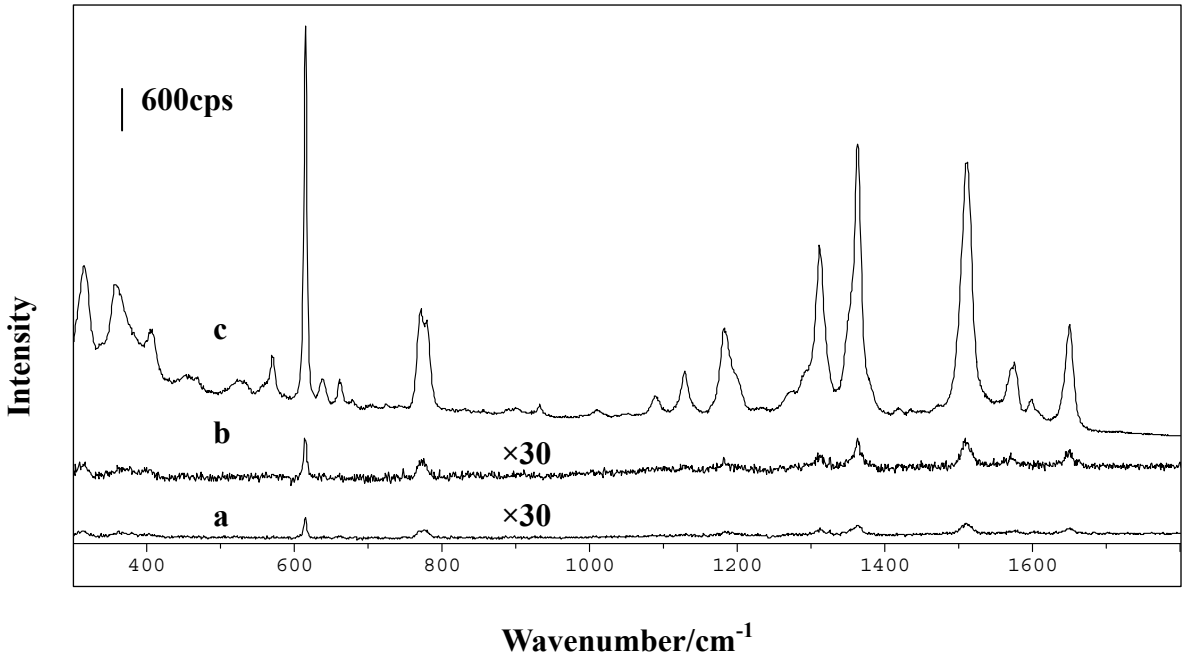

Fig. S5. SERS spectra of R6G (3×10^{-7} M) mixed with the product made: (a) at room temperature, (b) at 50°C (c) under boiling (Sample 2)

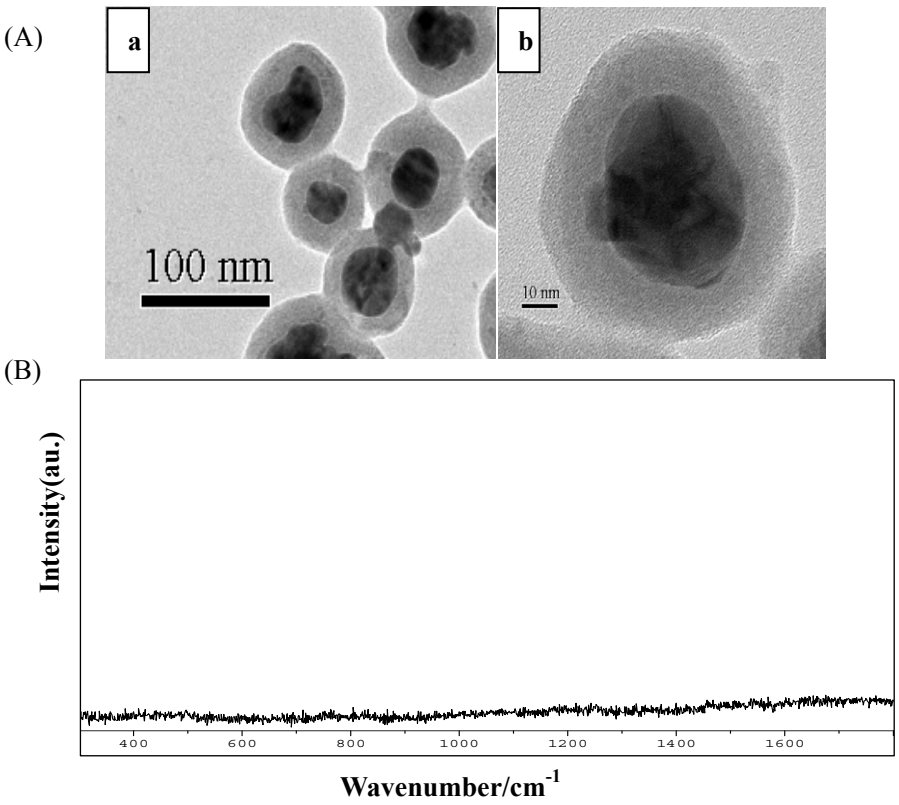

Fig.S6. (A)TEM images of the product from the addition of L-AA: (a) 1000 μl of 1.0×10^{-3} M (b) HRTEM image (B) SERS spectrum of R6G of 3×10^{-5} M mixed with the product from the addition of L-AA about 1000 μl of 1.0×10^{-3} M

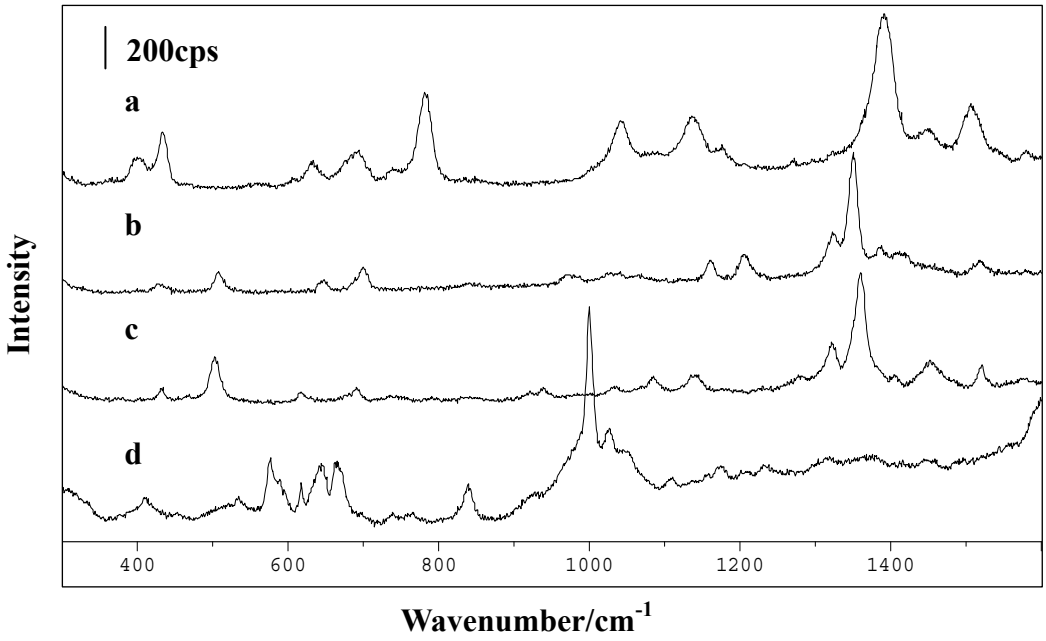

Fig. S7. SERS spectra of (a) 2-amino-5-mercapto-1, 3, 4-thiadiazole (5×10^{-5} M) (b) 4-methyl-4H-1, 2, 4-triazole-3-thiol (5×10^{-5} M) (c) 2-mercapto-1-methyl-imidazole (5×10^{-5} M) (d) 4-aminoantipyrine (5×10^{-5} M) mixed with Sample 2

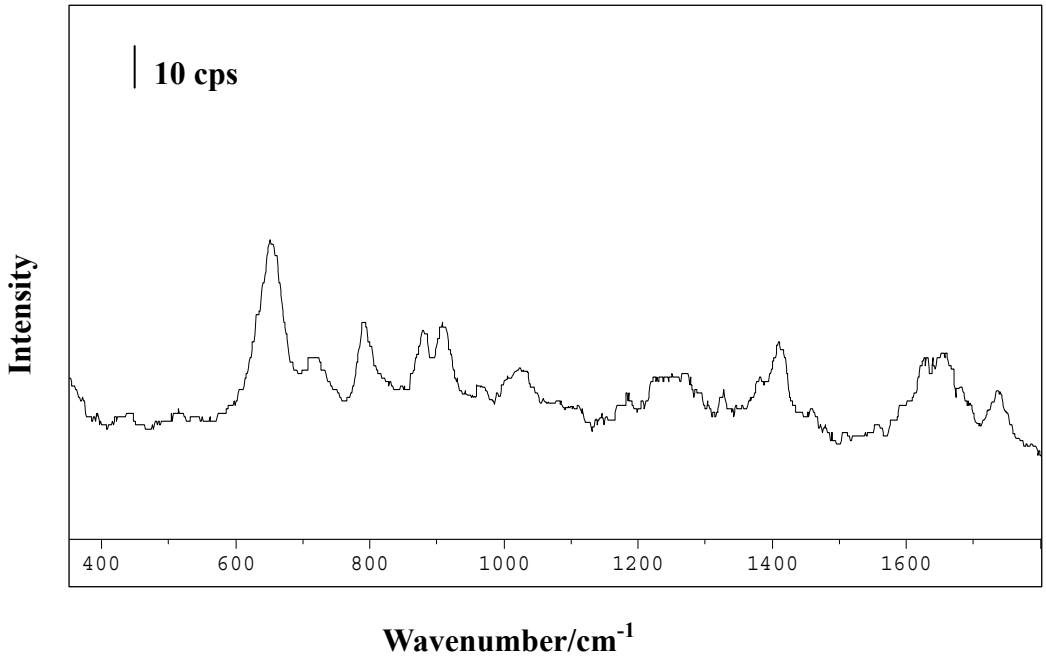

Fig. S8. SERS spectrum of the L-glutathione (3×10^{-5} M) mixed with Sample 2